

# Work Order ID 57570

April 8, 2010 12:54:10 PM

Page 1

Item ID: D3163-041

Accept

Setup Start

Revision ID:

Stop

Item Name: Cover Assembly

Start Date: 4/08/10 Start Qty: 2.00

Cust Item ID:

Required Date: 4/16/10 Req'd Qty: 2.00

Customer:

Reference:

Approvals: Process Plan: W Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_  
QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Run Start

Stop

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Draw Number	Draw Rev.	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	----------------	--------------	--------------	---------------	---------------	------------------	----------------

Draw Nbr	Revision Nbr
D3163	Rev E

2x

100 Small Fab 0.00



Small Fab

Memo

0.00

Small Fab

Rivet D3163-3 to D3163-1.  
Ensure holes line up

= 7 m, 10/07/14

110 QC5- Inspect part completeness to step on W/O 0.00



QC

Memo

0.00

Quality Control

8 10/07/14

(2)

120 Grey Sandtex(Ref:4.3.5.6) per QSI005 4.3 0.00



Powdercoat

Memo

0.00

Powder Coating

START TIME: 9:00  
OVEN TEMPERATURE: 320°  
FINISH TIME: 9:30

2 BR 10-7-15

W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Work Order ID 57570

April 8, 2010 12:54:10 PM



Page 2

Item ID: D3163-041

Accept



Setup Start



Revision ID:

Stop



Item Name: Cover Assembly

Start Date: 4/08/10 Start Qty: 2.00



Cust Item ID:

Required Date: 4/16/10 Req'd Qty: 2.00

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop



Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Draw  
Number

Draw  
Rev.

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

130

QC3- Inspect Part Finish

0.00



QC

Memo

0.00

Quality Control

*M 10/07/15 X2*

140

Small Fab

0.00



Small Fab

Memo

0.00

Small Fab

Install Nutplates as per Dwg D3163

*=7 m-k 10/07/16 (2x)*

150

QC5- Inspect part completeness to step on W/O

0.00



QC

Memo

0.00

Quality Control

*S 10/07/15 (2x)*

W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

**Work Order ID 57570**

Page 3

April 8, 2010 12:54:11 PM

Item ID: D3163-041

Accept



Setup Start



Revision ID:

Stop



Item Name: Cover Assembly

Start Date: 4/08/10 Start Qty: 2.00



Cust Item ID:

Required Date: 4/16/10 Req'd Qty: 2.00



Customer:

Reference:

Run Start



Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_

Stop



QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Sequence ID/  
Work Center IDOperation  
DescriptionSet Up/  
Run HoursDraw  
NumberDraw  
Rev. Plan  
CodeAccept  
QtyReject  
QtyReject  
NumberInsp.  
Stamp

160

Identify as per dwg & Stock Location 241A

0.00



Packaging

Memo

0.00

Packaging

10-7-19

SP 20

170

QC21- Final Inspection - Work Order Release

0.00



QC

Memo

0.00

Quality Control

10-7-20

MF 10-7-19

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Picklist Print

April 8, 2010 12:54:09 PM

Page 1 / 2

Work Order ID: 57570

Parent Item: D3163-041

Parent Item Name: Cover Assembly

Comments: IPP A 05.10.25 New issue KJ/RF  
IPP Rev:06-07-03 As per Rev D JLM

Start Date: 4/08/10

Required Date: 4/16/10

Start Qty: 2.00

Required Qty: 2.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
D3163-1		Manufactured	No			100	Each	1.0000	2.0000			
Plate												

## Warehouse

## Loc Qty

## Loc Code

### Location

Main Warehouse

ST178

52621 ✓

D3163-3 Manufactured No

100 Each

0.0000 2.0000

Plate

MS20426AD3-13 10.07.14 Purchased No

100 Each

6,848.000 8.0000

RIVET

17681

## Warehouse

## Loc Qty

## Loc Code

### Location

Main Warehouse

ST316

6848

104374

2848

110398

4000

B57752 (X) m-h 10/07/14  
(X) m-h 10/07/14  
B57753 (2X) m-h 10/07/14  
8X m-h 10/07/14

W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries



# Picklist Print

April 8, 2010 12:54:09 PM

Work Order ID: 57570

Parent Item: D3163-041

Parent Item Name: Cover Assembly



Comments: IPP A 05.10.25 New issue KJ/RF  
IPP Rev:06-07-03 As per Rev D JLM

Start Date: 4/08/10

Required Date: 4/16/10

Start Qty: 2.00

Required Qty: 2.00

Component Item ID Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
MS20426AD3		Purchased	No			140	Each	15,114.00	8.0000			
<div> <div>  <p>Rivet</p> <p>10.07.14 051042</p> </div> <div> <p>M/ 104374</p> <p>Warehouse Location</p> <p>Main Warehouse</p> <p>ST316 15114</p> <p>4179 3276</p> <p>4444 5678</p> <p>4533 6160</p> </div> <div> <p>Loc Qty</p> <p>Loc Code</p> </div> </div> <div> <p>(8x) m.k. 10/07/15</p> </div>												
MS21059L08		Purchased	No			140	Each	323.0000	4.0000			
<div> <div>  <p>Nut</p> </div> <div> <p>Warehouse Location</p> <p>Main Warehouse</p> <p>ST301 323</p> <p>112314 200</p> <p>12706 123</p> </div> <div> <p>Loc Qty</p> <p>Loc Code</p> </div> </div> <div> <p>(4x) m.k. 10/07/15</p> </div>												

# Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	

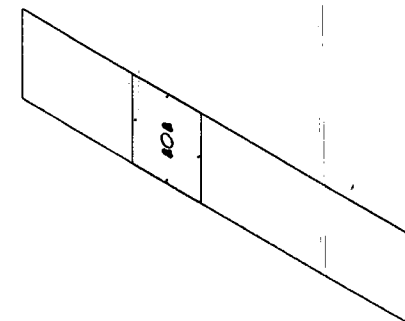
Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

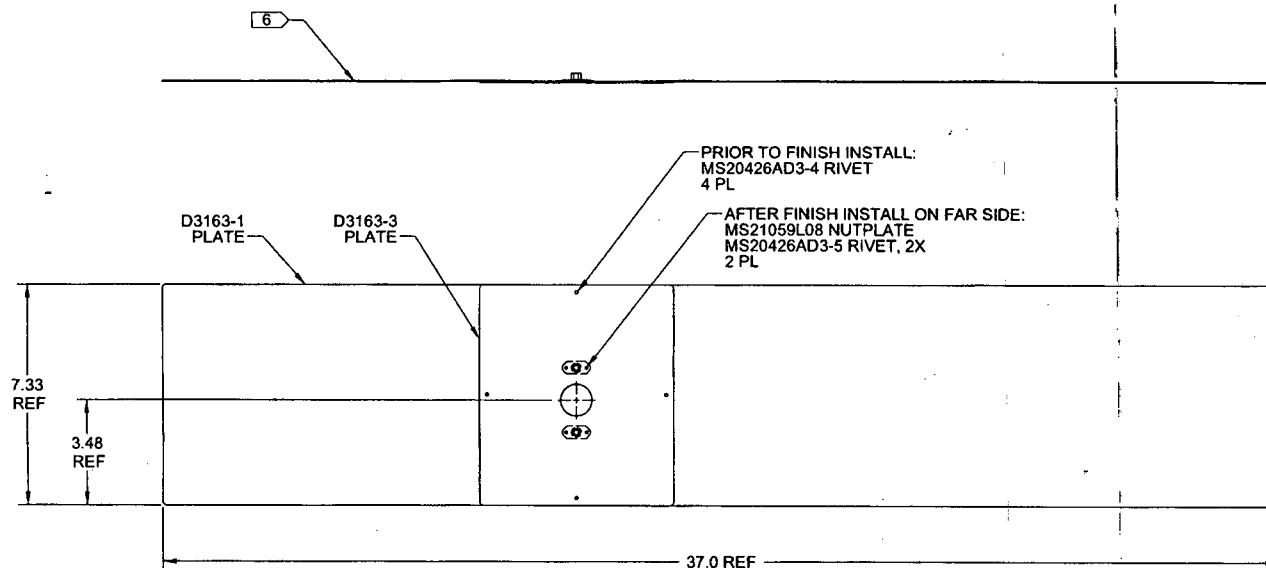
NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

ITEM	QTY -041	P/N	DESCRIPTION
1	X	D3163-041	PLATE
2	1	D3163-1	PLATE
3	1	D3163-3	PLATE
4	4	MS20426AD3-4	RIVET
5	4	MS20426AD3-5	RIVET
6	2	MS21059L08	NUTPLATE



**RELEASED**  
2009-11-09  
mp



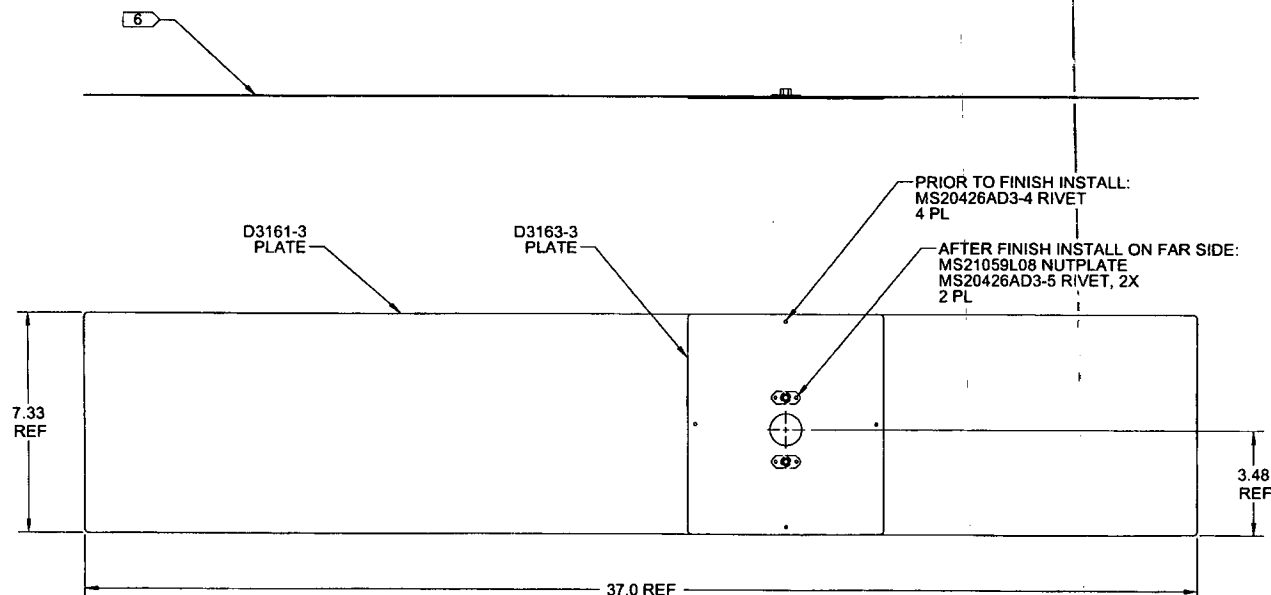
**D3163-041 PLATE**

E	REDRAW, 13.69 WAS 12.81 (TYPO, ZN B6-3), NCR 09-095	CP	09.10.21
D	ADD 4 RIVETS, RMV ADHESIVE	CB	06.06.26
C	Ø 1.050 WAS Ø 1.000	RF	05.11.22
B	7.33 WAS 7.20, RMV PERIMETER HOLES	RF	04.10.06
A	NEW ISSUE	RF	02.04.26
REV.	DESCRIPTION	BY	DATE
DESIGN	DART AEROSPACE LTD		
DRAWN	HAWKESBURY, ONTARIO, CANADA		
CHECKED	D3163	REV. E	
MFG. APPR.		SHEET 1 OF 4	
APPROVED		TITLE	SCALE
DE APPR.		PLATE	NTS
DATE	09.10.21	COPYRIGHT © 2002 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR DISSEMINATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

- NOTES:**
- 1) MATERIAL: N/A
  - 2) FINISH: POWDER COAT GREY SANDTEX (4.3.5.6) PER DART QSI 005 4.3 AFTER ASSEMBLY OF D3163-3 PLATE  
PRIOR TO INSTALLATION OF MS21059L08 NUTPLATES
  - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
  - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
  - 5) BREAK SHARP EDGES: N/A
  - 6) IDENTIFICATION: IDENTIFY WITH DART P/N "D3163-041" USING FINE POINT PERMANENT INK MARKER
  - 7) WEIGHT: 1.00 lbs

W/D  
57570

ITEM	QTY	P/N	DESCRIPTION
1	X	D3163-042	PLATE
2	1	D3163-1	PLATE
3	1	D3163-3	PLATE
4	4	MS20426AD3-4	RIVET
5	4	MS20426AD3-5	RIVET
6	2	MS21059L08	NUTPLATE



**D3163-042 PLATE**

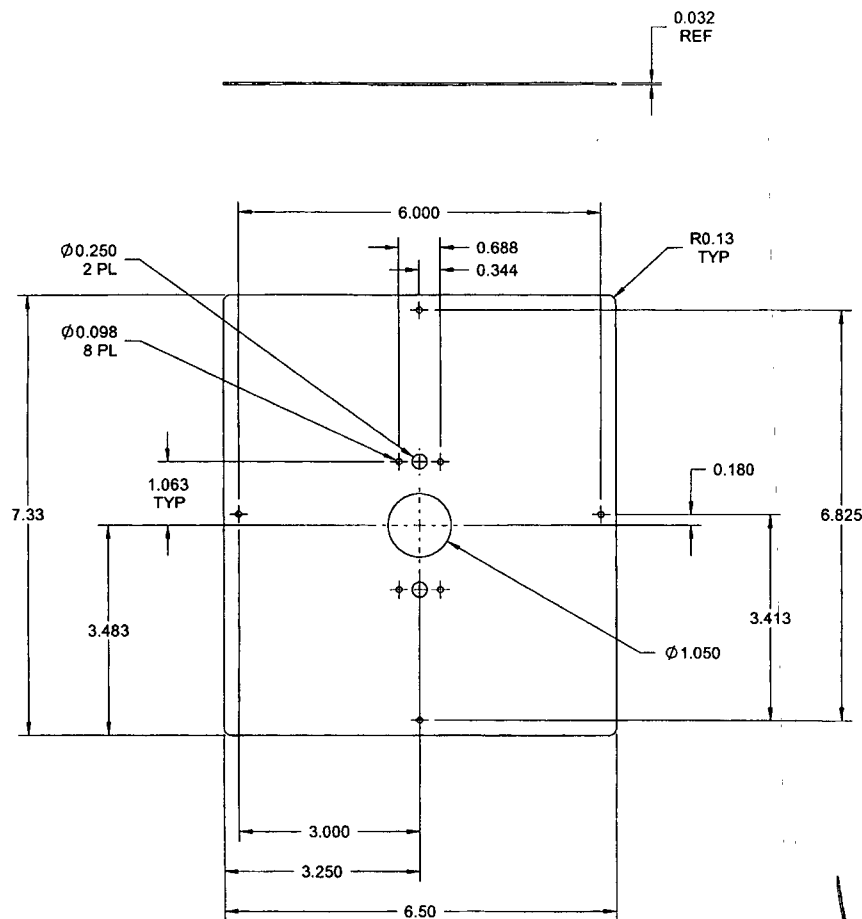
**NOTES:**

- 1) MATERIAL: N/A
- 2) FINISH: POWDER COAT GREY SANDEX (4.3.5.6) PER DART QSI 005 4.3 AFTER ASSEMBLY OF D3163-3 PLATE  
PRIOR TO INSTALLATION OF MS21059L08 NUTPLATES
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: N/A
- 6) IDENTIFICATION: IDENTIFY WITH DART P/N "D3163-042" USING FINE POINT PERMANENT INK MARKER
- 7) WEIGHT: 1.00 lbs

**RELEASED**  
2009 -11- 09  
W

DESIGN	<del>DE</del>	<b>DART AEROSPACE LTD</b>	
DRAWN	<del>DE</del>	HAWKESBURY, ONTARIO, CANADA	
CHECKED	<del>RS</del>	DRAWING NO.	REV.
MFG. APPR.	<del>MS</del>	D3163	SHEET 2 OF 4
APPROVED	<del>MS</del>	TITLE	SCALE
DE APPR.	<del>MS</del>	PLATE	NT
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# NOTES:

- 1) MATERIAL: 2024-T3 ALUMINUM SHEET 0.032 THICK PER QQ-A-250/4, REF DART SPEC. M2024T3S.032 OR 6061-T6 ALUMINUM SHEET 0.032 THICK PER QQ-A-250/11, REF DART SPEC. M6061T6S.032
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY WITH DART P/N "D3163-3" USING REMOVABLE TAG
- 7) WEIGHT: 0.15 lbs

**RELEASED**  
2009-11-09

DESIGN		<b>DART AEROSPACE LTD</b>	
DRAWN		HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. E
MFG. APPR.		D3163	SHEET 4 OF 4
APPROVED		TITLE	SCALE
DE APPR.		PLATE	NTS
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